THE

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L. P. YANDELL, M.D., and H. A. COTTELL, M.D.

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THE

# LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNÂ."

SATURDAY, JANUARY 12, 1884.

## Original.

### PROGNOSIS IN VARIOUS FORMS OF PARALYSIS*

BY PHILIP ZENNER, A. M., M. D.

To the laity the word paralysis seems always to have the same grave significance. They do not know that, depending on the underlying condition, this symptom may be of but trifling consequence, as well as a source of lasting disability, or a precursor of an early end. Unfortunately, even physicians sometimes associate with this word an unvarying meaning, one of evil augury, without attempting to determine the condition upon which the symptom depends.

I wish, in this paper, to speak briefly of some of the more prominent forms of paralysis with especial reference to their prognosis, and though the latter can not be properly determined without previous knowledge of the exact lesion or disease in each instance, yet a general consideration of the gravity of the various forms, and of means which often assist us to properly determine the prognosis in the individual case, will, I trust, be both instructive and interesting.

We will first consider the most common form of paralysis of central origin—hemiplegia.

In the great majority of cases this is due either to embolism of the middle cerebral artery or its branches, or to hemorrhage in the vicinity of the corpus striatum. There is paralysis of the limbs and face on the side opposite to the seat of lesion. If the patient recovers from the apoplectic attack, which usually ushers in the paralysis, and his life is no longer in immediate danger, the important question arises, will he be permanently disabled by the paralysis, or will the latter entirely or largely disappear? The answer to this question will mainly depend on the seat of the lesion—on what part of the brain has been injured. When only the large basal ganglia have been injured the paralysis usually disappears after a lapse of time, but when the internal capsule has been destroyed the paralysis is permanent. Whether the latter has or has not occurred is very soon revealed by the symptoms. If the internal capsule has been destroyed, there is subsequent degeneration of the pyramidal strands in the spinal cord, attended by such symptoms as rigidity of the paralyzed limbs, and exaggerated tendon reflexes. The rigidity of the paralyzed muscles is first observed after some time, usually months, after the original injury; but the exaggerated tendon reflexes (the foot clonus, exaggerated patellæ, tendon reflex, etc.) may already be detected within a few days or weeks. They, therefore, at a very early day will assist us to a correct prognosis.

So, when we are called to a case of hemiplegia, and wish to determine whether the paralysis will be temporary or permanent, we should examine the tendon reflexes. If we find them to be exaggerated, we may already surmise that permanent injury has been done; and if, after a few weeks or months, rigidity of the paralyzed muscles is also observed, that surmise becomes positive knowledge.

As a general rule the prognosis of spinal paralysis is less favorable than that of cerebral origin. But among the various forms of spinal paralysis, some that present the most marked motor symptoms have in reality the most favorable prognosis. Thus we often find with Pott's disease of the spine a high degree of paraplegia which may, later, partly or entirely disappear.

The paralysis is not produced, as was long supposed, by direct pressure on the cord from the angular curvature, but is due to

*Read before the Mitchell District Medical Society, Dec. 28, 1883.

secondary changes in the meninges or substance of the cord. The symptoms presented are those usually attributed to sclerosis of the lateral columns, paraplegia, rigidity of the limbs, often convulsive movements in the paralyzed parts, and greatly exaggerated tendon reflexes. In these cases, even though the paralysis be of some years' standing, improvement may be expected with much confidence after the acute changes in the bone have subsided.

In the disease termed spastic spinal paralysis, supposed to be due to primary sclerosis of the lateral columns of the cord, and presenting symptoms exactly similar to those just described, the prognosis is also more favorable than the marked symptoms would suggest; more favorable, in fact, than that of most of the organic diseases of the cord.

Let us next consider peripheral paralyses with special reference to the means of determining their prognosis. There are very many forms of peripheral paralysis due to traumatic or other causes, and also all degrees of intensity, sometimes being only slight and transient, at other times complete and lasting.

Let us take for illustration two of the most common forms, facial paralysis, and paralysis of the muscles supplied by the radial nerve. One awakes in the morning and finds that the face is drawn to one side, that the eyelids can not be closed—there is facial paralysis. There is no apparent cause; it is termed rheumatic paralysis. Probably the sheath of the nerve somewhere within the temporal bone is swollen and the nerve thus compressed. Again, we arise in the morning and find the muscles supplied by the radial nerve paralyzed. The patient had probably been lying upon that arm and thus compressed the nerve trunk. We find what is termed wrist-drop. The appearance is like that of lead paralysis, but it has come on suddenly and is limited to one side.

In either of these cases, especially the latter, the prognosis is generally favorable, the result full recovery. But the paralysis may be of very short duration; it may be of long duration, and sometimes it is permanent.

Have we any means by which we can determine, then, the prognosis in each case? Yes, in the electrical reaction of the nerves and muscles.

Normally the muscles contract when electricity is applied to them directly, or to the nerves supplying them. But the electrical reaction may be quite different as a result of pathological changes. The most prominent changes are those termed the reaction of degeneration. Here the muscles do not contract when electricity is applied to the nerve supplying them; they do not contract when the interrupted or faradic current is applied directly to the muscles, but do contract, in a different manner from the normal, when the constant, or galvanic current is applied directly to the muscles.

Now let us revert to our case of facial paralysis. If no change takes place in the electrical reaction, but the latter remains as it is normally, the paralysis will be of short duration, and a full recovery will ensue. But if the reaction of degeneration is soon observed, paralysis will be of long standing; recovery will be slow, perhaps incomplete; or the paralysis may be lasting.

In some cases the reaction of degeneration becomes only partly developed. Here the prognosis is more favorable, though less so than where no changes occur in the electrical reaction.

The same test will assist us in the prognosis of one case of paralysis of muscles supplied by the radial nerve as well as in all other cases of peripheral paralysis.

I will next mention a class of cases in which the prognosis is far more favorable than the clinical picture presented would, at first sight, lead us to suppose; that is, the paralysis following infectious diseases. We most frequently find these after attacks of diphtheria. The paralysis of the soft palate, muscles of the eye, etc., are known to you all. Their prognosis is nearly always favorable. But these are not the only paralyses caused by diphtheritic poisoning. There is, less frequently, paralysis of spinal origin, paraplegia, ataxia, etc., which may be very marked, even alarming in their appearance, but whose prognosis is nevertheless as favorable as that of the more common forms of diphtheritic origin.

The prognosis of this class of cases illustrates the fact that in forming a proper judgment of the gravity of a case, it is often necessary to know not only the seat and extent of local damage, but also something of the character of the pathological process, to know the course of the disease. Thus, we have learned of diphtheritic paralysis that, while apparently very serious, they usually terminate favorably. In some other diseases we will find that while the paralytic manifestations, especially in the beginning, may be very mild, we must expect the most unfavorable

termination. In cases of multiple sclerosis of the brain and spinal cord, though the symptoms presented may be slight, we know that the tendency of the disease is to extend, and, though very slow in its progress and variable in its manifestations, it will not terminate in recovery. The same may be said, with some modifications, of locomotor ataxia.

These diseases, though tending to extend, do not, as a rule, immediately threaten life, while some others lead directly to a fatal termination. Thus, amyotrophic lateral sclerosis, attended by paralysis and wasting of muscles, causes death, through involving the medulla oblongata, within a few years of its inception.

Progressive muscular atrophy terminates in the same manner, at a much later date. Some acute spinal paralysis, notably Lantry's paralysis, may terminate fatally within a few weeks, while others, not unlike the latter in general appearance, as some cases of subacute anterior poliomyelitis may terminate in full recovery.

In all these cases, in order to arrive at a proper prognosis, we must first make a correct diagnosis and know the course of the disease.

CINCINNATI, OHIO.

## Miscellany.

AN UNEXCELLED SALINE—FLEXNER'S EFFERVESCENT SULPHATE OF SODIUM (GLAUBER'S SALT)—THE MOST ACTIVE AND MOST PALATABLE LAXATIVE AND PURGATIVE NOW BEFORE THE PROFESSION—INDICATED WHENEVER A SALINE IS REQUIRED.—This is the heading of an advertisement on another page of the NEWS, by Prof. Jacob Flexner, one of Louisville's most accomplished pharmacists. From what we hear of this laxative, and from some personal experience with it, we incline to the belief that it is what is claimed for it—a not unpleasant dose and an effective aperient. Than the old-fashioned Glauber's salt, nothing more disgusting was ever invented. In the advertisement referred to other valuable remedies are mentioned.

PROCREATION AND POVERTY.—The widespread attention now being given to the question of housing the poor of great towns, and to the manner in which their lives are lived, is likely to result in some definite action being taken with a view to remedying the distress that so plainly exists in this association. (Medical Press.) It requires to be considered, however, whether the remedy to be adopted is not a more radical one than the mere improvement of sordid dwellings and the replacing them with habitable abodes. The class of people to be dealt with is probably the most improvident of any forming the population of the country; they have never learned, because they have never been taught, how to improve their own condition and raise themselves out of the depths into which they have fallen. Inheriting wretchedness, they cherish it almost with the veneration of religion; at any rate, it never enters into their calculations to promote efforts, either individual or combined, to remove the discomfort by which they are surrounded, and in which they have been bred. They are, moreover, permitted without rebuke, even if they are not encouraged by exhortation, to intensify their own miserable state by adding to the number who are born into it. Marriages contracted in early youth and followed by the birth of numerically large families are commonest in the ranks of those who go to people the "outcast" quarters of the cities and great towns. The maternity officers of every hospital are, alas! too familiar with the wretchedness and squalor existing among the families that inhabit the densely-aggregated buildings in the poorer quarters; they know how every addition to the already over-burdened bread-winner's task entails an increased amount of privation to every member of the family, and necessitates appeals to the compassion of the charitable in frequent cases that might, but for such untoward improvidence, be absolutely uncalled for. Magistrates also are only too well conversant with the misery such action on the part of our poor creates and intensifies, and during the past week Mr. Bridge, sitting at the Southwark Police Court, very emphatically condemned the youthful marriages so frequent in the district he controls. Inculcation of principles of providence, and tuition of the people in practices of economy and restraint may be trusted to as implicitly as immediate improvement of their surroundings to ameliorate the conditions under which they exist; and it would be well if well-meaning philanthropists would give consideration to this side of the question while discussing how to relieve the distress which is now exciting so much comment and consideration.

MALARIA. — Written for the Louisville Medical News by H. H. C. C.

Long, long ago—some scores of years—
And somewhere in the "Bluegrass Belt"
Of our Kentucky, it appears
The good old-fashioned doctor dwelt.

He rode the very best of nags
All over this wide area,
With physic in his saddle-bags
For all ills save malaria.

Just here 't is apropos to say,
While doctors had the same old passion
For hobbies, at that early day
Malaria was not in fashion.

'T is true our doctor was a giver
Of calomel in liberal doses,
And seldom overlooked the liver
In making out his diagnoses.

The liver! foe to nature's laws,
No regular M.D. would dare to
Deny it was the direful cause
Of all the ills that flesh is heir to.

Then blood-letting was all the rage,
And so, where'er his practice led him,
What e'er the patient's ill or age,
Galen invariably bled him.

(Lamented Drake! would'st thou not bow
Thy noble head in deep dejection,
To hear them speaking even now
Of the "lost art of venesection?")

And so our doctor plied his art,
With humble effort to advance it;
He had his day—let him depart—
With him the liver and the lancet.

* * * * * * * *

The atmosphere was damp and muggy
When, in a brand-new Yandell buggy,
A doctor passed, the hat he wore
Upon its band this motto bore,
Malaria.

Before a brown-stone front he stopped,
Then from his buggy lightly hopped,
And as the bell he boldly rung,
This word was ready on his tongue,
Malaria.

Beside the patient's bed he stood
In meditative attitude,
He felt the throbbing pulse awhile,
Then murmured, with a knowing smile,
Malaria.

The patient ventured to suggest
That too much dinner had oppressed
His stomach; but he spoke in vain—
The doctor smiled and said again,
Malaria.

Now, looking wise he writes with pains,
"Sulphate of quinine twenty grains,"
"Divided into capsules four;"
Then sallies forth to hunt for more
Malaria.

At night he to his home repairs,
Charges his visits, says his prayers;
But often for "amen," I've heard,
He absently lets slip the word,
Malaria.

If we, with voices loud and deep,
Bless him who first invented sleep,
Then why not raise a monument
To that blest man who did invent
Malaria?

HEALTH CRYSTALS. — Taken from the Ladies Sanitary Association, of London.

A—s soon as you are up shake blanket and sheet;
B—etter be without shoes than sit with wet feet;
C—hildren, if healthy, are active, not still:
D—amp bed and damp clothes will both make you ill;
E—at slowly and always chew your food well;
F—reshen the air in the house where you dwell;
G—arments must never be made too tight;
H—omes should be healthy, airy, and light;
I—f you wish to be well, as you do, I've no doubt,
J—ust open the windows before you go out;
K—eep the rooms always tidy and clean;
L—et dust on the furniture never be seen;
M—uch illness is caused by the want of pure air;
N—ow to open the windows be ever your care;
O—ld rags and old rubbish should never be kept;
P—eople should see that their floors are well swept;
Q—uick movements in children are healthy and right;
R—emember the young can not thrive without light;
S—ee that the cistern is clean to the brim;
T—ake care that your dress is all tidy and clean;
U—se your nose to find if there be a bad drain;
V—ery sad are the fevers that comes in its train;
W—alk as much as you can without feeling fatigue;
X—erxes could walk full many a league;
Y—our health is your wealth, which your wisdom must keep;
Z—eal will keep a good cause, and the good you will reap.

NOTE ON ENTERIC FEVER.—This dangerous treatment was lately reported by Dr. J. W. Moore before the Academy of Medicine in Ireland: Briefly summarized, the case reported was one of severe enteric fever, running a course of four weeks, characterized by a succession of high temperature during the first twenty days, ataxic symptoms, obstinate constipation, hypostatic congestion, and right basic pneumonia. The patient was a grocer's assistant, aged twenty. Treatment of a decidedly active kind was employed, and apparently with marked benefit to the patient. On five separate occasions twenty grains of quinine were given as an antipyretic in quickly succeeding doses of ten grains each; twice the

wet pack was employed for two hours at a time to control the pyrexia; and on three occasions, at intervals of forty-eight hours, ten-grain doses of calomel, guarded with a grain of opium, were administered as an antiseptic aperient. Having referred to the use of calomel in typhoid fever in Germany, the author alluded to Dr. Wassiljeff's experiments in Hoppe-Seyler's laboratory as to the influence of calomel on fermentation and bacteria, from which it would seem probable that much of the good which calomel is known to accomplish in various intestinal troubles is due to its aseptic or antiseptic properties.

NEW METHOD OF TOOTH-DRAWING.—A dentist of Geneva has invented a new and ingenious process of tooth-drawing. A small square of India-rubber, pierced with a central hole, is pushed over the tooth till the upper part of the root is reached. (British Medical Journal.) The India-rubber gradually contracts, pulls on the root, and the offending tooth is finally enucleated, without causing the patient any pain whatever. Four or five days are generally required to complete the operation. Very slight bleeding and a slight swelling of the gum are the only inconveniences experienced. M. Paul Bert brought this ingenious method before the Académie des Sciences in Paris; when M. Galippe remarked that the process was already known, and quoted a case in support of its efficacy, in which a young girl had placed a ring of India-rubber round the two front incisors, and forgot she had done so; the result being that she lost the teeth.

MEDICAL PEERAGES.—Mr. J. Brindley James thus pertinently writes, in the British Medical Journal: The remarks already made, in more than one quarter, by the press respecting the inadequate recognition ever shown by the State of the services of the medical profession, in contrast with honors conferred with lavish liberality on far less eminent services, would tend to show that the inequality attending such dispensations is becoming more clearly patent to the public. As the editor of the Student's Journal very pithily puts it: "Why is a peerage and a seat in the Upper House this week conferred on a poet, while a baronetcy is thought quite good enough for the most distinguished and hard-working physicians or surgeons? The original theory, that elevation to the peerage is a distinction and reward specially reserved for services rendered to the State, would in no way be violated by its conferment on so able and deserving a public benefactor as Sir Joseph Lister, the inventor of antiseptic surgery, or Sir James Paget, the leader of contemporaneous pathologists, or others too numerous to name, whose inventions, discoveries, and untiring exertions in the cause of suffering humanity may well entitle them to the consideration of being classed as "having done the State some service."

Moreover, exaltation to the peerage implies a share in the hereditary legislation of the country. *Public hygiene plays no unimportant part nowadays in the consideration of the senator and political administrator; and who among the noble lords would be more fitted to give an opinion on matters where the health of the army, navy, or civil community might be concerned, than a medical lord?* We have no wish to disparage, however faintly, the claims of the Poet Laureate to the dignity which he has just attained, but we venture to ask, Where was *his* service to the State? And how is it that far greater poets were never made peers? Was there ever a Baron Shakespeare, or a Baron Wordsworth, or a Viscount Pope? Surely they were quite as deserving. That peerages should be conferred on men of letters, like Macaulay, who are statesmen and senators as well, is logical enough; but, if poets are to be peers, why not eminent artists? Why not have a Lord Irving, or Lord Toole, in honor of the stage? or Lord Benedict in honor of music? Why not make peers of Mr. Du Maurier, *Punch's* admirable artist, or of Mr. John Thomas, the Queen's Welsh harpist? The men who, like Jenner, give us vaccination; who, like Simpson, give us chloroform; or, like Sir W. Fergusson, conservative surgery; or ovariotomy, as Sir Spencer Wells—these men may be held to have done service to the State as well as to humanity at large by the discoveries which will preserve their memories in the grateful immortality of thousands of their fellow-beings.

WATER-DRINKING.—The Lancet wisely says: It is somewhat surprising that in a country in which rain falls almost every day, in large or small measure, the use of pure water as a drink is not better understood than it is. Even now that the sway of temperance is well established, and continues to extend, we should be surprised to learn that a majority of Englishmen do not habitually discard the use of the natural

beverage for one or other in which it is compounded with foreign ingredients. Yet its very purity from all but a salutary trace of mineral matter is what renders it capable of exactly satisfying, and neither more nor less than satisfying, the needs of thirsty tissue, and of assisting by its mere diluent and solvent action, without stimulation or other affection of function, the digestion and excretion of food. No other qualifications are necessary. Given digestible, solid food, and fair, that is normal, digestive power, water alone is all-sufficient as liquid. During the feebleness consequent on disease or overwork every thing is changed. There is blood, though impoverished in quality, to receive and convey nutritive material, and there are tissues to be fed, but the *vis a tergo*, the driving power of the heart, resides in a languid muscle, and the alimentary canal, itself but poorly irrigated from that center of supply, receives what food is taken only to prove its incapacity to utilize it. Nature is flagging and a stimulant alone will make ends meet in the circle of tissue-building processes. As a general rule, however, abstinence holds the first rank, both in theory and practice. We do not assert that the man who regularly, and in strict moderation, partakes of a light stimulant—claret, for instance—may not, especially if he is equally regular in regard to out-door exercise, live comfortably to the full term of human life; but what we say is, that the more simply the man fares, the more he employs such adventitious measures for actual physical necessity, the more he will gain in health, in life, in working power, and in aptitude to benefit by stimulation when strength is failing from disease or from decay. But if water be the drink, how shall it be drunk? The means must have regard to the end required by them. To moisten food and prepare it for digestion it is hardly necessary to say that it should be taken with a meal; a couple of tumblerfuls at dinner is not an excessive quantity for most persons. For thirst-quenching properties nothing can surpass this simplest of drinks, and all which approach it in efficacy owe their power almost entirely to it. As to temperature, there is no real ground for supposing that one should not drink a sufficiency of cold water when the body is heated by exertion. The inhabitants of hot climates have no such objection. Some tropical wells are dug so deep that the water within them, even in hot seasons, is as cool as that of a European spring. In fevers, too, the use of ice in quantities sufficient to allay thirst is a part of rational and legitimate treatment. The shock which has to be avoided in all such states is not that which cools the mucous membrane, but that of sharp chill applied to the surface of the body. Some persons, however, find it convenient and beneficial to imbibe a certain amount of warm water daily, preferably at bedtime. They find that they thus obtain a bland diluent and laxative, without even the momentary reaction which follows the introduction of a colder fluid, and softened by abstraction of its calcareous matter in the previous process of boiling. This method, which is an accommodation to jaded stomachs, has its value for such, though it is not great even for them; but it affords no noticeable advantage for those of greater tone. The use of water as an aid to excretion deserves some remark. In certain cases of renal disease it has been found to assist elimination of waste by flushing without in any way irritating the kidney. Every one is probably aware of its similar action on the contents of the bowel when taken on the old-fashioned, but common-sense plan of drinking a glass of water regularly morning and evening, without any solid food. Whatever may be true of harmless luxuries, enough has been said to show that health, happiness, and work find stimulus enough in the unsophisticated well of nature.

Good Coffee.—In order to make good coffee the berry must be *fresh roasted and ground*. There is no difficulty whatever in roasting coffee, and this ought to be part of the *daily routine* of every well-regulated household. It is important to use enough coffee; one and a half to two ounces of coffee to a pint of water makes a first-rate beverage. Elaborate coffee machines for grinding are by no means necessary. If the coffee required for breakfast is put into a common earthenware jug over night, and cold water poured on it, it might be heated to the boiling in the morning by being allowed to stand in a saucepan of water over the fire. Violent ebullition is thus avoided, and the aroma is preserved. Out of ninety specimens of ground coffee purchased in London shops only five were found genuine.

Oleate of Quinia.—Add one to two drams of quinia alkaloid to two ounces of oleic acid, and rub patiently into the skin night and morning.

FORMATION OF VINEGAR.—The transformation of alcoholic liquids into vinegar has long been matter of discussion. (Popular Science News.) Pasteur holds that the formation of vinegar is a physiological phenomenon caused by vegetation of a particular bacterium, the *Mycoderma aceti;* while Leibig sees in it merely a chemical action of oxygen on alcohol. Recent observations by Herr Wurm, at the Breslau Institute of Plant Physiology, are regarded as putting the former view beyond a doubt, and Herr Wurm has succeeded in effecting the industrial manufacture of vinegar in accordance with Pasteur's idea. The conditions are a sowing of pure bacteria, a uniform temperature of 30° C., and a well-regulated addition of alcohol. The process goes on in large covered wooden receptacles (with side holes for air), into which are put two hundred liters of a mixture of vinegar, water, and alcohol, along with some mineral salts (phosphates of potash, lime, magnesia, and ammonia). The manufacture is said to be considerably more rapid than that by the old method, and more economical.

SENSIBLE TRAINING FOR GIRLS.—The Lasell Female Seminary, at Auburndale, Massachusetts, deservedly one of the most popular and successful of our boarding-schools for girls, has just begun its seventh annual course of "object-lessons in cookery," under the direction of Mrs. O. C. Daniell. (Popular Science News.) The dishes on the programme for the day are prepared and cooked before the class, and in a supplementary course the pupils prepare with their own hands each article in day's bill of fare, set their table, and then dine from the results. The mothers testify that the plan works well, the girls not only becoming good cooks, but heartily interested in the practical exercise of the culinary art at home. There are similar courses in dress-making and millinery, with equally satisfactory results. At the same time, the standing of the school in all other respects is of the very highest. We commend the example to other female seminaries.

INFLUENCE OF MALARIA ON PREGNANCY AND THE PUERPERAL STATE.—Goth, of Klaussembourg, a very malarial place, has had very favorable opportunities for studying this subject. From his observations it seems that:

1. Pregnancy gives no immunity from malarial infection.

2. Malaria predisposes to abortion, and especially to premature labor: it causes premature labor (*a*) by the death of the fetus, produced either by the high temperature of the mother, or by the direct action of the infecting principle on the fetal organism; (*b*) by bringing on uterine contractions, MacRunge having demonstrated experimentally that an elevation of the temperature to 40° C. causes uterine contraction. As in all paludal affections and symptoms, quinine is the remedy to be relied on.—*L'Independente.*

CULINARY HINTS FROM THE POPULAR SCIENCE NEWS.—Punch made with guava-jelly is nice for an invalid. One part of lime or lemon juice, two parts of sweet guava-jelly and white sugar, dissolved in boiling water, three parts of old rum, four parts of water.

A good way to extract the juice of beef for an invalid is to broil the beef on a grid-iron for a few minutes, and then squeeze the juice from it with a lemon-squeezer. Put a little salt with it. This may be given, as the sick one prefers, cold or hot, or it may be frozen and given in small lumps.

Sardines picked up fine, and mixed with cold boiled ham, also minced fine, and all well seasoned with a regular Mayonnaise dressing, make a delicious filling for sandwiches.

MATTHEWS DUNCAN ON MINOR DISPLACEMENTS OF THE UTERUS.—It is, I "believe, universally admitted that versions, flexions, and descent, are not necessarily the cause of any discomfort or disorder, and this is a cardinal fact in this question. Think of it. Thousands of blooming, happy, fertile women have displacements. To treat a displacement simply because it exists is a grave error, and yet not a rare one." . . .

There is another bad and too common practice which I must not omit to mention here; that is what is called straightening or putting up the womb, or replacing it, time after time, by the probe or finger. This has no other effect than to irritate the organ, for the displacement recurs immediately after the probe or finger is removed, as the practice itself shows.

HOW TO SERVE POTATOES.—At a luncheon given in connection with the recent International Potato Exhibition at the Crystal Palace, Sydenham, Mr. Shirley Hibberd remarked that there was still a good deal of

ignorance shown in putting potatoes on the table. It was a usual practice to bring them up in a porcelain dish with a close-fitting cover. In ten minutes the best potatoes, however carefully cooked, were thus utterly destroyed. He recommended that they should be placed in a wooden dish, or served in a porcelain dish with towels above and below to absorb the moisture.

THE EFFECTS OF TOBACCO. — In non-smokers of average constitutions the mean temperature of twenty-four hours amounts to 36.76° C. (or about 98° Fahr.), and the pulse-rate to 72.9°. (Med. Times and Gazette). In smokers the temperature reaches 37.02° C. (98.6° Fahr.), and the pulse-rate 89.9°. Tobacco-smoking, therefore, raises the temperature 0.26° C., and the pulse-rate 16°. In persons of feeble constitutions the temperature rises 0.43° C., and pulse-rate 11.9°. Taking a mean, tobacco may be said to raise temperature 0.29° C. (nearly 1° Fahr.), and to increase the cardiac pulsations by 12.7°. Representing the normal temperature at 1000 in non-smokers, in moderate smokers it rises to 1008; and whereas the pulse of the former may be taken at 1000, that of the smoker is 1180. It is by increasing cardiac pulsations that tobacco has such an injurious effect on some constitutions—such, at least, is the conclusion which Dr. Troitski communicates to the *Annales d' Hygiène.*

COUGHS.—It is sometimes forgotten that coughs, properly so-called, and in their integrity, are convulsive, expiratory efforts intended to eject from the air-cells or passages of the lungs, or from the windpipe or larynx, either secretions or exudations, or occasionally foreign substances, which impede the act of respiration. Unfortunately there is seldom any constant relation between the frequency and force of a cough, and the physical need for it. This is because, the act being, of course, performed by virtue of a special excitation of the nervous system, the degree of excitability of the nerves concerned in the production of the muscular contractions producing the cough determines its course and frequency, instead of their being governed, as they ought to be, solely by the exigencies of expulsion. Moreover, owing to the sympathetic connection of nerves energizing different groups of muscles and in relation with different centers, cough may be produced by excitations which are not local to the breathing organs. Therefore we find that cough, which ought to be a very simple process or function of a remedial or, at least, physically helpful kind, is in fact itself a cause of disturbance and disease by reason of its excessive and disorderly character. Very grave mistakes are made in practice by treating cough as a pulmonary affection and in itself morbid. It is in a very large proportion extra-pulmonary in its cause, and it is only morbid in itself when there is no disease or disturbance in the lung which can create a need for expulsive efforts. Cough is always a nervously induced phenomenon, and as such it ought to be treated with the utmost carefulness, so as to ascertain its cause, its *raison d'être*, and the proportional relation which subsists between need and effort where need really exists. Without clear views on these various aspects of the question of cough in each particular case, it can not be intelligently treated.—*Lancet.*

MR. BOWMAN is to be a baronet. (Med. Times and Gaz.) The work by which Mr. Bowman gained his reputation was done so long ago that the present generation, but for an occasional reminder in the physiological text-books, are apt to forget that he was a world-famed physiologist before he became an eye-surgeon. It is more than forty years since he was awarded a Royal Medal by the Royal Society; and men who are now thinking of retiring from practice, when they were students read no physiology but Todd and Bowman's. Forty years ago it was quite probable that Mr. Bowman would become the leading London surgeon, and his subsequent retreat to a specialty, though it was of immense service to that specialty, no doubt delayed both the development of scientific surgery in this country and the State recognition of his own merits. If Mr. Bowman had remained a general surgeon he would probably have had his baronetcy ten years ago.

ANOTHER Paris *interne* has fallen a victim to diphtheria contracted in the performance of his duty. Three weeks ago a child was brought into hospital suffering from diphtheria, and was attended by M. Gustave Rivet, the *interne* on duty. The next day he sickened; the membrane invaded the larynx, and tracheotomy was discussed, but M. Rivet was then too weak to undergo it. On Monday last he died.—*Med. Times and Gaz.*, December 15th.

# The Louisville Medical News.

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L. P. YANDELL, M.D., - - - - - - - }
H. A. COTTELL, M.D., - - - - - - - } Editors.

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## IS VACCINIA MODIFIED VARIOLA?

In another column (page 29) will be found an extract from the British Medical Journal of December 22d, which announces the settlement of this long-mooted question.

The article alludes to the views of Jenner, who believed that vaccinia was modified variola, and analyzes the discussion which ever since his time has been carried on by English and German physicians on the one hand, who have accepted Jenner's opinion, and the French on the other, who have maintained that the two affections had separate sources of origin.

The writer refers to a series of experiments performed in 1880–81, by Dr. Voigt, of Hamburg, through which, with subsequent practical study, this observer arrives at results not only conclusive as to the question at issue, but still further significant in that they bring to light some facts of great practical value to the physician, with timely hints for those who may be engaged in the propagation of bovine lymph.

Among the conclusions of Voigt, which seem to be of especial interest are, (1) That the energy of variola-vaccine obtained by inoculating the calf with smallpox lymph from man is such as to render it unfit for use in vaccinating human beings until its force has been diminished by several transmissions from calf to calf. (2) That animal lymph originally very active diminishes in efficacy when transmitted from calf to calf sooner than humanized lymph transmitted from arm to arm. In short, that humanized lymph gives better results both in man and beast after many cultivations than those given by bovine lymph; whence it follows that *retro-vaccine* of the first generation should be preferred to animal lymph from old stocks.

The first conclusion would seem to explain the violent action of some specimens of bovine lymph, which now and then produce in primary vaccinations symptoms scarcely less severe than those of varioloid. The second accounts for the failure of many specimens of bovine lymph to take even under the most favorable conditions, while humanized lymph may be transmitted from arm to arm for a long term of years and still give most satisfactory results.

Several points of interest, both practical and theoretical, are also suggested by the following: (1) That the duration of immunity from smallpox given by vaccinia depends on the intensity of the pathological process, and (2) that, after the lapse of twelve years, persons who have been attacked with smallpox show the same susceptibility to vaccination as those who have been vaccinated at an equally remote period; consequently, children of twelve years of age, vaccinated in infancy, present moderately favorable conditions for the development of smallpox. Revaccination, therefore, of all children at the age of twelve, or even after, is to be highly recommended.

The lesson of the first statement need scarcely be dwelt upon here, since physicians are always careful to procure fresh active lymph, and are never satisfied with any result less than a true Jennerian vesicle with decided systemic manifestations of the the disease; but it may be suggested in passing that the point contended for by

Flint, who cites in proof an analysis of six thousand cases by Simon, that the degree of protection is in direct proportion to the number of vesicles (up to four at least) produced in each primary vaccination, finds additional strength in this conclusion.

The second is indeed a remarkable statement, and unless the real meaning of the author has been overlooked by the translator, we are at loss to see how, under the view that the difference between vaccinia and variola is one of degree only, it shows that the revaccination, after twelve years, of persons who have been the subjects of vaccinia is any more important than the *vaccination* after the same time of those who have had smallpox, since, according to the above statement, the subjects of both appear to be equally susceptible.

In answer to this objection it may be urged that the protective power of vaccinia is limited to twelve years, while that of variola extends to a term reaching beyond the life of any human being.

But this being true, we may ask why, if variola and vaccinia are only different degrees of one and the same disease, should the latter protect its subject against the former and itself during a period of twelve years, while the former, after that time, fails to protect against the latter, but does guard its subject against its own recurrence?

This is the only point of difficulty presented by Dr. Voigt's conclusions, and if he has not been misunderstood it may be set aside as a question requiring further study.

His other deductions are clear and seem to be fully borne out by his experiments and observations. On the whole, these investigations may be regarded as the most important made in this department of science since the days of Jenner himself, since they not only add new luster to a name immortal in medicine, but render still more effective for good the most beneficent gift which science, genius, and philanthropy have ever been privileged to bestow upon mankind.

## Bibliography.

**Cholera a Disease of the Nervous System.** By JOHN CHAPMAN, M.D, M.R.C.P., M R.C.S., late Assistant Physician to the Metropolitan Free Hospital, etc. London: J. & A. Churchill, New Burlington Street. 1883.

This pamphlet consists of a letter written by Dr. Chapman, which was published in the *Journal de Médicine de Paris*, August 25, 1883; a review of Dr. Chapman's work on diarrhea and cholera, their nature, origin, and treatment through the agency of the nervous system, by Sir Andrew Clark, Bart., M.D. (Medical Times and Gazette, November 3, 1866), and several notices of the work taken from contemporary journals.

Dr. Chapman writes with great clearness and force, and has brought forward an array of imposing facts, which would seem to go far in support of his theory.

Further comment here is unnecessary, since our readers have already received, at the hands of our Paris correspondent, liberal extracts from the letter above mentioned, with timely comments upon the opinions advocated by the author.

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**A Practical Treatise on Materia Medica and Therapeutics.** By ROBERTS BARTHOLOW, A.M., M.D., LL.D., Professor of Materia Medica and General Therapeutics in Jefferson Medical College, of Philadelphia. Fifth edition, revised and enlarged. New York: D. Appleton & Co.

The sixth decennial revision of the U. S. Pharmacopeia has borne much good fruit, by necessitating the revision of our standard works in Materia Medica and Therapeutics, and, among the samples which we have so far seen, none bears better testimony to the mellowing influence of this phase of scientific progress than the book under notice.

Dr. Bartholow has the happy faculty of throwing into bold relief the useful and practical features of his subject, while the theroetical and technical aspects are used only to give breadth and depth to his picture. A man of great research, he does not weigh down his text with elaborate quotations, nor disturb the felicity of his reader by long parentheses and foot-notes. He makes free use of the researches and opinions of others, but briefly and in his own words, and, keeping the names of his authorities so far as practicable out of the text, he gives them place in a bibliographical list at the end of each chapter.

Though he regards the physiological action of drugs as the true basis of all thera-

peutic advancement, he does full justice to all such medicines as may be empirically prescribed; though giving due weight to the importance of clinical notes, and the value of experiments on the lower animals as tests of the action of drugs, his text is remarkably free from the wearisome details of those studies which render some therapeutic treatises unreadable.

These, with a rational classification of remedies, and careful attention to the therapy of every disease likely to be met with in this latitude, would seem to be the features to which the work owes its great popularity with physicians of the West and South.

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**The Diagnosis and Treatment of Diseases of the Ear.** By OREN D. POMEROY, M.D., Surgeon to the Manhattan Eye and Ear Hospital, Ophthalmic Surgeon to the New York Infant Asylum, etc. With one hundred illustrations. Price, $3.00. New York: Bermingham & Co.

The subject is discussed under the following heads: Instruments used in examination of the ear, with hints as to methods; diseases of the auricle; diseases of the external auditory canal; diseases of the middle ear; mastoid affections; unclassified diseases; diseases of the ear mostly or wholly confined to the labyrinth or acoustic nerve; instruments for aiding the hearing.

Avoiding so far as possible those difficult technical questions in which much of the pathology of aural disorders is involved, the author confines his attention in the main to such features as are likely to be useful in diagnosis and treatment, while, by condensation of text and abundant illustrations, he has made his treatise easy to understand, readable, and instructive.

The literature of special medicine puts within reach of the profession many able works in otology; but none of these, so far as we have seen, would seem to be better suited to the needs of the general practitioner than Dr. Pomeroy's book.

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**A Treatise on Syphilis in New-born Children and Infants at the Breast.** By P. DIDAY, Ex-Surgeon to the Hospital De L'Antiquaille, Lyons. Translated by G. Whiteley, M. D. With notes and an appendix by F. R. Sturgis, M.D., Professor of Venereal Skin Diseases in the New York Post-Graduate Medical School, etc. Wood's Library Standard Medical Authors for 1883. New York: William Wood & Co.

This work is especially interesting as being one of the first monographs ever written upon the subject of infantile syphilis. Its character therefore is distinctive and original, the book in the main being made up of the results of its eminent author's own investigations. So high did it stand in the estimation of English surgeons and physicians, that it was translated and published by the New Sydenham Society in 1858. Since that time syphilographers have made free use of it in developing this department of their works.

The text has received careful revision at the hands of Prof. Sturgis, with such emendations and additions as were necessary to place it fairly abreast with the scientific requirements of the day.

The practitioner will find in the work full practical information in regard to infantile and congenital syphilis, while the privilege of being able to trace in an original monograph the steps by which one of the first great masters was able to lay the foundations of our knowledge in this department of science will be duly appreciated by all lovers of historic medicine.

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INTRODUCTORY ADDRESS delivered before the Medical Class of Dartmouth College, August 1, 1883. By Louis Elsberg, A.M., M.D., Prof. of Laryngology, Hanover, N. H.

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SHORT-SIGHTEDNESS.—Dr. Cohn, who has summarized various statistics on the question of hereditary short-sightedness (Medical Times and Gazette), which have from time to time been collected by Erisman, Scheiding, Pflüger, and other authorities on the subject, finds that the researches of the last-named writer resulted in the following facts being elucidated as to the percentage of short-sighted pupils: Public schools, without predisposition, eight per cent.; with predisposition, nineteen per cent. Higher schools, without predisposition, seventeen per cent; with predisposition, twenty-six per cent. The difference of about ten per cent in favor of those children without an hereditary predisposition to short-sightedness is, according to Pflüger's opinion, a reliable basis of argument. At the same time, he asserts that this relatively low figure is arrived at after the necessary elimination of those cases where the predisposition has remained latent, and where it is of such a nature as only to become the source of ocular affection under circumstances of an unfavorable character.

# Correspondence.

## PREGNANCY-VOMITING.

*Editors Louisville Medical News:*

I hope you will allow me to offer some criticism on Dr. Rufus W. Griswold's eristic paper on Pregnancy-Vomiting, recently published in the NEWS.

The Doctor, after rejecting all the various theories advocated by the most distinguished gynecologists as to the cause of the disease (and if it is no disease, it is a strange exhibition of health), brings forth his own, as follows: "The predominating potentiality of vomiting in pregnant women is the pregnancy itself." That is very good, as far as it goes; but is it not strange that Burns, Penmore, Churchill, Dewees, Ramsbotham, Marion Sims, Henry Bennett, and the other great gynecologists he so unmercifully criticized, have never thought of this.

This brilliant theory, sweeping away all transcendental speculations on the subject, reminds me of a troublesome gourmand who at times consulted me for a predominating potentiality of vomiting from an overloaded stomach. In assigning to him the cause of his malady, I took the same "common-sense" view of the case that Dr. Griswold does of pregnancy-vomiting, by telling him it was caused by taking too much into his belly. This explanation would be sufficient and satisfactory for the laity, but would not be a proper answer to the members of a learned profession.

There would have been something heroic on the Doctor's part in making this assault on great men, if he had not afterward accepted their respective theories to account for pregnancy-vomiting in certain cases. As no medical authority would fix on any positive cause for vomiting, the Doctor must have been on a Quixotic cruise in passing judgment on those theories.

In taking up his own theory, there are several strong points not in its favor. The uterus may turn the stomach into rebellion through sheer erethism. What would be the predominating potentiality of this order of vomiting? Is not such vomiting of the same type as that of pregnancy? If not, who will venture to give us a differential diagnosis between the two?

And again, if the predominating potentiality of vomiting in pregnant women was pregnancy itself, why is it that so many pregnant women never manifest this symptom? There is another point which the Doctor may have overlooked: if "the cause of vomiting in pregnant women is the pregnancy itself," why is it that it usually lessens its action as the fetus increases in size?

To be governed by our experience and the authority of those the Doctor has denounced, we may find symptomatic vomiting wherever there is uterine hyperemia, either of a pathological or a physiological character. To sustain this view we will quote from Prof. Gunning S. Bedford:

"It is one of the fundamental principles in uterine pathology, that the various sympathies which the uterus is capable of evoking in a state of pregnancy are oftentimes brought into active operation when gestation does not exist; these sympathies being caused to show themselves in consequence of disease of uterine organs, whether functional or organic. In amenorrhea, dysmenorrhea, etc., we often find the patient complaining of sick stomach; and again, in carcinoma of the uterus, one of the most distressing symptoms is frequently excessive gastric disturbance."

This reflex vomiting may be induced from a diseased condition of other organs, as the brain, liver, kidneys, etc., and even from general systemic conditions, as in fever, shock, malignant diseases, etc. The immediate cause of reflex vomiting would seem to be *arterial tension*, and nature calls, in the relaxing phenomena of vomiting, to relieve this condition. When this tension involves the stomach itself, the vomiting usually becomes obstinate and excessive, with a pathology of its own.

G. P. HACHENBERG, M. D.

AUSTIN, TEXAS.

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*Editors Louisville Medical News:*

Since the publication in the Louisville Medical News, some three months ago, of the article on the treatment of typhoid fever with the iodide of potassium, I have treated three other cases with the same results, the fever in no instance continuing beyond the twelfth day of treatment. I claim that the treatment recommended in that article relieves congestion, irritation, and inflammation of the mucous membrane of the ilium, the stage of ulceration being prevented. None of my cases have relapsed, nor has hemorrhage, in the twenty-nine cases successfully treated, occurred.

R. N. BARBOUR.

LOUISVILLE, KY., Jan. 8, 1884.

## Selections.

VACCINIA AND VARIOLA.—Some of our readers may remember how, in April 1881, Dr. Leonhard Voigt, the Superintendent of the Vaccine Institute at Hamburg, experimentally solved the vexed question of the origin and the nature of cow-pox, and vindicated triumphantly the reputation of our immortal countryman Jenner. (British Medical Journal.) The subject, however, is of such importance that, before stating the conclusions at which he has arrived after two years' constant and laborious observation and experiment, it may be as well shortly to recapitulate his earlier proceedings.

Two views had hitherto been, and notwithstanding Dr. Voigt's absolute demonstration of the erroneous character of one, are still, held on the relation between cow-pox and smallpox. Jenner believed that horse- and cow-pox were originally derived from man, and were, in fact, modified forms of smallpox altered by their transmission through the bodies of the lower animals. Ceely and Badcock in England, and Thiele in Russia, held the same views, and believed that they had successfully effected the transformation. The former, in 1840, sent some of his lymph to Schneemann in Germany, where it was long used with best results. But Doctor Martin, of Boston, a strong advocate of animal vaccination, on trying to repeat the experiments of Ceely, set up an epidemic of smallpox, the disease spreading from his vaccinated subjects by ordinary contagion; and the like unfortunate consequence followed other attempts of the same kind and put a check to further enterprise in the same direction.

The second opinion is that of the French school, represented in this country by the veterinary surgeon Fleming, and shared by many of less note. It may be briefly stated as follows: Smallpox, sheep-pox, and goat-pox are acute specific diseases, highly infectious, attended by general febrile disturbance, and extremely fatal; in fact, bearing a close resemblance one to the other, but not mutually protective. *Horse-pox, cow-pox, and camel-pox, on the contrary, are merely local diseases, with little fever, and no danger to life, communicable only by actual contact or inoculation; and yet, strange to say, each of them is antagonistic to and protective against smallpox.* Smallpox, they say, if inoculated into the cow, is unaltered; the local manifestation is merely a blind boil in most cases, but, if any fluid can be obtained from it, it is still smallpox-virus pure and simple. They thus account for Martin's unlucky experience, and explain away Ceely's seeming success by urging that his supposed vaccinations were, in fact, mild and favorable examples of inoculation of smallpox itself, though they find it best to ignore the subsequent successes of Schneemann.

This was the position of parties when, in the winter of 1880 and 1881, Voigt resolved on investigating the whole question afresh. His first attempts to inoculate the calf with human smallpox were, as usual, unsuccessful; indeed, the difficulty is such that Reiter failed in fifty trials, extending over ten years, though he succeeded in the fifty-first. On the fourth occasion, using pus from a virulent case of unmodified smallpox, Voigt was rewarded by the production of a *bouton*, on which a small vesicle appeared for a few hours. He found what he deemed a *corpus vile* in an ill-nourished scrofulous child, not previously vaccinated, and under treatment for itch in a ward in which smallpox had just broken out. Somewhat rashly, he vaccinated the child with the fluid from his vesicle; the results were alarming, intense fever, axillary buboes, etc.; but, fortunately for all parties, the child survived. He then vaccinated a calf with the same lymph, and a third from the second, and so on. From the fourth in succession he vaccinated four children; of these, one failed to take, but the others were rather severely affected. From the thirteenth and fourteenth calves he again vaccinated children, with excellent results. Indeed, from and after the ninth in the series of calves, the pustules were indistinguishable from the best Beaugency stock, both in themselves and in their results on the human subject. Voigt therefore concludes, not only that Jenner was right in his idea of the origin of cow-pox, but that Martin's untoward results were due to his having, like himself, used variolous matter of a virulent type, and neglected the precaution of mitigating it by successive transmissions, or, as Pasteur would say, cultivations, in the calf. All cases of cow-pox supposed to be spontaneous are, he believes, cases of unintentional variolation, or retro-vaccination, as when a woman milks a cow after handling her recently vaccinated infant. Thus, too, he explains the usual seats of the disease in the horse and the cow, the ankles of the former and the udders of the latter

being the parts most frequently handled; and the exemption of the males, bulls or oxen, is easily intelligible on the same hypothesis, for in retro-vaccination bull calves are found to be quite as susceptible as the other sex. The various sources of the so-called spontaneous cow-pox in vaccine in modified and mild variola, or in variola of a severer kind, equally account for the varying intensity of the results obtained in the first vaccination performed therewith.

During the past eighteen months, Doctor Voigt and his colleagues have used the "new lymph" on a large scale, both for retro-vaccination of the calf and for vaccinations and revaccinations of the human subject of all ages, and prefer it to ordinary humanized or to Beaugency lymph. Unlike the older stocks of animal lymph, it keeps remarkably well in tubes, with or without glycerine. An unavoidable change of quarters, leading to a temporary deterioration, brought out the fact that dry and well-ventilated stalls were essential to success in bovine inoculations, whether with variolous or with vaccinal matter, as he had already been led to consider a moderately low temperature more favorable than a higher.

In his most recently published report he sums up the results of his observations under nine heads, which may be looked on as an epitome of the whole question.

1. It is possible to create vaccine by the inoculation of the calf with lymph from the pustules of human beings the subjects of smallpox, but success must not be expected in every case.

2. The energy of variola-vaccine obtained in this way is such that it is not fit for the purpose of vaccinating human beings until it has been several times transmitted from calf to calf, or from ox to ox, and its intensity has been thus diminished.

3. In the first year this new lymph has a greater protective power than animal lymph of older stocks.

4. Vaccinia and variola are derived originally from the same contagium, and give to those affected by them an immunity one against the other.

5. The duration of this immunity depends on the intensity of the pathological process.

6. *After the lapse of twelve years, persons who have been attacked with smallpox show the same susceptibility to vaccination as those who have been vaccinated at an equally remote period; consequently, children of twelve years of age, vaccinated in infancy, present a moderately favorable soil for the poison of smallpox.*

7. *Therefore, revaccination of all children at or even after the age of twelve is highly to be recommended.*

8. Animal lymph originally very active diminishes in efficacy when transmitted from calf to calf, sooner than humanized lymph transmitted from arm to arm. On the whole, that is, after a long time, humanized lymph gives better results both in man and beast; whence it follows that animal lymph from old stocks gives less success than retro-vaccine of the first generation.

9. Carefully generated, and in well ventilated and regulated stalls, variola-vaccine is the most energetic of all, not only when taken direct from the calf, but especially in its humanized form. Consequently, if we would obtain the most powerful protective lymph we should, when occasion offers, from time to time reproduce a stock of variola-vaccine.

CHLOROFORM-WATER. — (Medical Times and Gazette.) This application, which is much employed in Paris is prepared as follows: An excess of chloroform is poured into a bottle three parts filled with distilled water, and, after repeated shaking, the mixture is allowed to stand until the extra chloroform is deposited and the liquid quite clear. The transparent portion is then to be removed by a syphon, forming a saturated solution of ten grams of chloroform per liter. Applied on compresses, either in its pure state, or diluted with a half or its whole weight of water, it is found to relieve superficial pains; but when these are more deeply situated, a very hot linseed-meal poultice is first applied, which is afterward replaced by the compress of chloroform-water. Active revulsion is thus produced, which relieves the pain. Associated with a weak solution of opium it relieves vague dental pain; and with syrup of morphia it is successfully given internally for various forms of *malaise* from indigestion, such as gapings, eructations, sense of weight, etc. It is also useful as a palliative in cancer of the stomach. — *Union Medicale.*

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| Gentian, | q. s. |

For one pill. One three times a day.

THE RELATIONS BETWEEN DENTAL LESIONS AND DISEASES OF THE EYE.—Mr. Henry Power read a paper on this subject. (The British Medical Journal's report to the Odontological Society of Great Britain, November 5th.) It was only within the last sixty years that any connection between dental lesions and affections of the eye had been noticed by writers on ophthalmic diseases. Travers and Frick, in 1824 and 1826, were the first who made any reference to this connection, and they only mentioned difficult dentition as one of the causes of strabismus. Since that time, however, knowledge on the subject had been gradually added to by various observers. That there was such a disease as reflex sympathetic ophthalmia had long been known, since this was constantly being brought under the notice of ophthalmic surgeons by cases in which injury to one eye was followed, after a period of very variable duration, by inflammation of the uninjured eye, of a low but steadily progressive type, generally leading to more or less serious impairment, or even to complete loss of vision. It was well known also that injuries affecting the first (ophthalmic) division of the fifth pair might affect the eye of that side, and there were good reasons for believing that damage to other branches of the fifth pair might be the cause of ophthalmic troubles. Cases confirming this view were referred to. The existence of this connection with reference to dental nerves was specially dwelt upon by M. Delestri, in an essay published in 1870, in which he reported several cases of visual disturbance occurring in connection with odontalgia. The fact that dental irritation might, under certain circumstances, set up reflex irritation of the eye could not now be doubted. This might express itself in any of the following ways: The reflex irritation might affect the striated or unstriated muscles, the mucous membrane and cornea, or the optic nerve and retina, and intra-ocular tissues. One of the commonest forms of visual disturbance induced by dental disease *was loss or failure of the power of accommodation*, due to paralysis of the ciliary muscle. Dr. Hermann Schmidt, of Berlin, who had specially investigated this point, had found diminished power of accommodation in nearly eighty per cent of patients suffering from various forms of dental irritation, the failure being most marked in young subjects. Cases are on record in which paralysis of the iris and exophthalmia had been caused by dental irritation, but these were of rare occurrence. Strabismus was not so often due to dental causes as had at one time been believed; still such cases did occur, as did also cases of the levator palpebræ, and of the orbicularis palpebrarum, supplied by the third and seventh nerves. Severe conjunctivitis not unfrequently resulted from this cause; and Mr. Power narrated a case which had come under his own observation, in which an abscess of the cornea seemed to be intimately connected with the presence of carious teeth on the same side, resisting all treatment until they were removed, when the inflammation gradually subsided, though not without leaving great impairment of vision. He then went on to quote some remarkable cases in which amaurosis had been induced, and in which, after a relapse of several months, the offending tooth had been abstracted, and the sight of the eye completely regained. Lastly, the relation of dental irritation to glaucoma was referred to, the result of various investigations going to prove that, where other circumstances predisposed to the disease, the irritation of a carious tooth might be a very active exciting cause. In conclusion, Mr. Power said that in most forms of eye disease, especially in cases which resist ordinary treatment, the condition of the teeth should always be examined, and if faulty conditions present themselves, these should be at once rectified; thus one at least of the possible causes of these diseases will have been removed.

A MEANS OF ASCERTAINING THE COURSE OF THE SMALL BOWEL IN THE OPERATION OF ABDOMINAL SECTION.—R. Frank Rand, M. B, F. R. C. S., in British Medical Journal, December 22d, says: It is confessedly difficult to distinguish the upper from the lower end of a knuckle of small intestine presenting at an abdominal wound; yet it is often desirable to know this when practicing abdominal section for the relief of internal intestinal obstruction, or in attempting duodenostomy, so called. Operators have ere this passed feet of intestine through their hands, uncertain as to whether they were proceeding upward or downward in the direction of the tube.

The jejunum and ileum, loosely moored to the spine by the mesentery, are the districts of the bowel usually in question. The mesentery, at its free border, follows the windings of this portion of the gut, and is correspondently complex; but, on approach-

ing the spine, it rapidly narrows, until, at its attachment along the front of the column, its root is but about six inches in extent. This attachment of the root, extending, it will be remembered, from the left side of the body of the second lumbar vertebra to the right sacro-iliac synchondrosis, follows roughly the middle line of the body, its two surfaces facing nearly right and left.

The relation of the bowel to the root of the mesentery furnishes a sure guide to the direction of the bowel; for, if the piece of bowel which presents at the abdominal wound be held in a line with the body, and the bowel be in its true direction—that is, the apparently upper end be really so—the hand, passed along the side of the bowel and backward toward the spine, will be guided by the mesentery—if this last be held out taut from the spine—to the same side of the spinal column. Thus passed to the right side of the bowel, the hand will be conducted by the mesentery to the right side of the column; to its left side, if passed to the left of the bowel. Here, at the mesenteric root, the hand may be passed upward and downward, without hindrance, along its attachment. But, should the apparently upper end not be really so, the hand, passed to the right of the bowel, will be guided by the mesentery over to the left side of the spine; passed to the left of it, it will be guided over to the right side. In explanation, we may look upon the mesentery as a partition dividing the abdominal cavity into two compartments, having a simple arrangement of right and left posteriorly at the spine, but completely arranged toward the free intestinal border.

The above method has been tried, always with the correct results, by several of my friends and by myself, when making post-mortem examinations. It seems to me to be worthy of trial on the living, and will, I hope, in some cases, clear away doubt.

LET NATURE REMOVE THE PLACENTA.—In *Deutsch. Med. Woch.* Dr. Dohrn thus sums up his experience (Obs. Gaz.):

1. In one thousand lying-in women, in whom the expulsion of the placenta was left to nature, the results were far better than in one thousand others in whom Credé's method of expulsion was used.

2. The one thousand lying-in women, in whom the placenta was spontaneously expelled, had considerably less hemorrhage and fever after delivery. In those cases treated by Credé's method portions of the membranes were frequently retained, and there were more fatal cases than in the others.

3. The advantages which are conditional to the method of Credé are especially seen in the cases in which the placenta is expressed during the first five minutes. After a long time the expression was more complete, but never as safe as by the spontaneous method.—*Medical Age.*

RESECTION OF THE STOMACH.—At the Medical Congress of Olten, Profs. Kocher, of Berne, and Socin, of Bâle, presented a report of cases of cancer of the pylorus treated by resection of the stomach. Thirty cases of resection of the stomach have been reported in Germany alone; of these, ten have ended in recovery. In twenty-six of the cases there was cancer, and in four ulcer of the stomach; three of the latter made a rapid recovery; seven only of the cancer cases recovered. In two of the latest cases, occurring in women forty years of age, the digestive functions were completely re-established.—*Brit. Med. Jour.*

OBESITY AND BRAIN-WORK.—Our contemporary, Health, last week refers to the working power (mental) of stout men. (Medical Press.) After giving some notable instances, it says: "And there is at present an English physician weighing over twenty stone (280 lbs.), who is second to none in his great mental powers, versatility, and brilliant power of writing and speaking." Of whose corporeal and mental capaciousness does the editor here speak?

[Why, of J. Milner Fothergill, of course. Who else, in Britain is so vast of body and prolific of pen as the weighty, witty, and wise Fothergill?]

## ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes of Stations and Duties of Officers of the Medical Department, U.S.A., from December 29, 1883, to January 5, 1884.

*Appel, Daniel M.*, Captain and Assistant Surgeon, having relinquished the unexpired portion of leave of absence granted by S.O. 68, Hdqr's Division of the Atlantic, November 16, 1883, and reported for assignment, assigned to duty at Fort Porter, N. Y. (Par. 2, S.O. 247, Dept. of the East, December 29, 1884) *Havard, Valery*, Captain and Assistant Surgeon, assigned to duty in charge of office of Medical Director, Dept. of Texas, during the temporary absence of that officer. (Par. 2, S.O. 164, Dept. of Texas, December 31, 1883.